BARONENKOV, A.V., kand.tekhn.nauk

Improvement of planning and stimulation of interest in bonuses on the part of miners. Gor. zhur. no.3:15-19 Mr '63. (MIRA 16:4)

BARONENKOV, A.V.

Improvement of planning and workers' material incentives in the mining industry. Prace mzda 11 no.9:423-427 S'63

MERKULOV, N.; BARONENKOV, Ye.

Seven high prizes out of ten. Mast.ugl. 8 no.3:25-26 Mr '59. (MIRA 13:4)
(Bruxelles--Exhibitions) (Coal mining machinery)

BARONETSKIY, P.I.

Red Cross Society of the White Russian S.S.R. Zdrav. Belor 5 no.1: 25-27 Ja '59. (MIRA 12:7)

1. Predsedatel' TSentral'nogo komiteta Obshchestva Krasnogo Kresta BSSR.
(WHITE RUSSIA--RED CROSS)

EXCERPTA MEDICA Sec 4 Vol 12/6 Med. Micro. June 59

1778. CULTURE OF A LARGE VIRUS, ISOLATED FROM NEWBORNS DYING FROM ENCEPHALO-PNEUMONIA - Culture d'un virus à grandes dimensions isolé à partir de nourissons morts d'encéphalo-pneumonie - Baroni V., Museteanu C. and Museteanu V. Hop. d'Enfants Cotrocent, Bucarest - C. R. SOC. BIOL. (Paris) 1957, 151/10 (1690-1692)

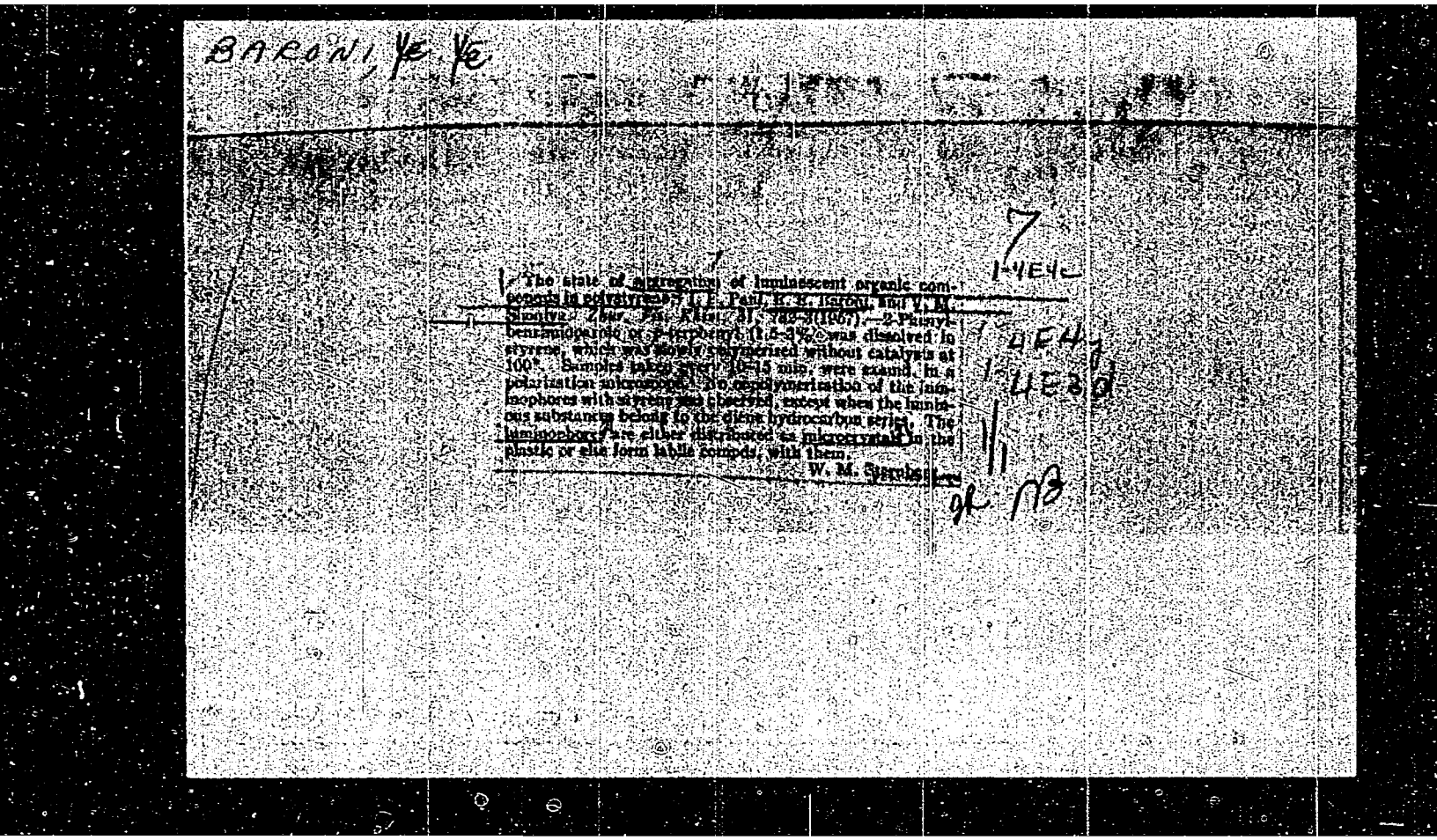
From various organs of deceased newborn infants an agent was isolated which was pathogenic for hens' eggs and mice. It measured 0.2-0.3 μ. It probably belongs to the lymphogranuloma-psittacosis group of viruses.

Frenkel - Amsterdam (L, 4, 7)

ANDREYESHCHEV, Ye.A.; BARONI, Ye.Ye.; KRUVYRZINA, K.A.; PANI, I.E.; ROZMAN, I.M.; SHOMIYA, V.M.

Plastic scintillators based on polystyrene. Prib. i tekh. eksp. no.1:32-34 Jl-Ag '56. (MLRA 10:2)

(Scintillation counters) (Styrene)



Baron, Ye. Ye.

7

1-4E4c

1-4F4d

1-4E8d

1. The state of aggregation of luminescent organic compounds in polystyrene. I. E. Paul, K. K. Baron, and V. M. Sinotova. Zhur. Fiz. Khim. 41, 748-51(1967).—2-Phenylbenzamidoperinone or 2-terphenyl (1.5-3%) was dissolved in styrene, which was slowly copolymerized without catalysts at 100°. Samples taken after 10-15 min. were examd. in a polarization microscope. No crystallization of the luminophores with styrene was observed, except when the luminous substances belong to the diene hydrocarbon series. The luminophores are either distributed as microcrystals in the plastic or else form labile compds. with them.

W. M. Sinotova

21(8)

AUTHORS: Selinov, I. P., Grits, Yu. A., SOV/89-5-6-17/25
Khulelidze, D. Ye., ~~Baroni, Ye. Ye.~~,
Bliodze, Yu. A., Demin, A. G., Kushakevich, Yu. P.

TITLE: New Isotopes of Antimony (Novyye izotopy sur'my)

PERIODICAL: Atomnaya energiya, 1958, Vol 5, Nr 6, pp 660 - 660 (USSR)

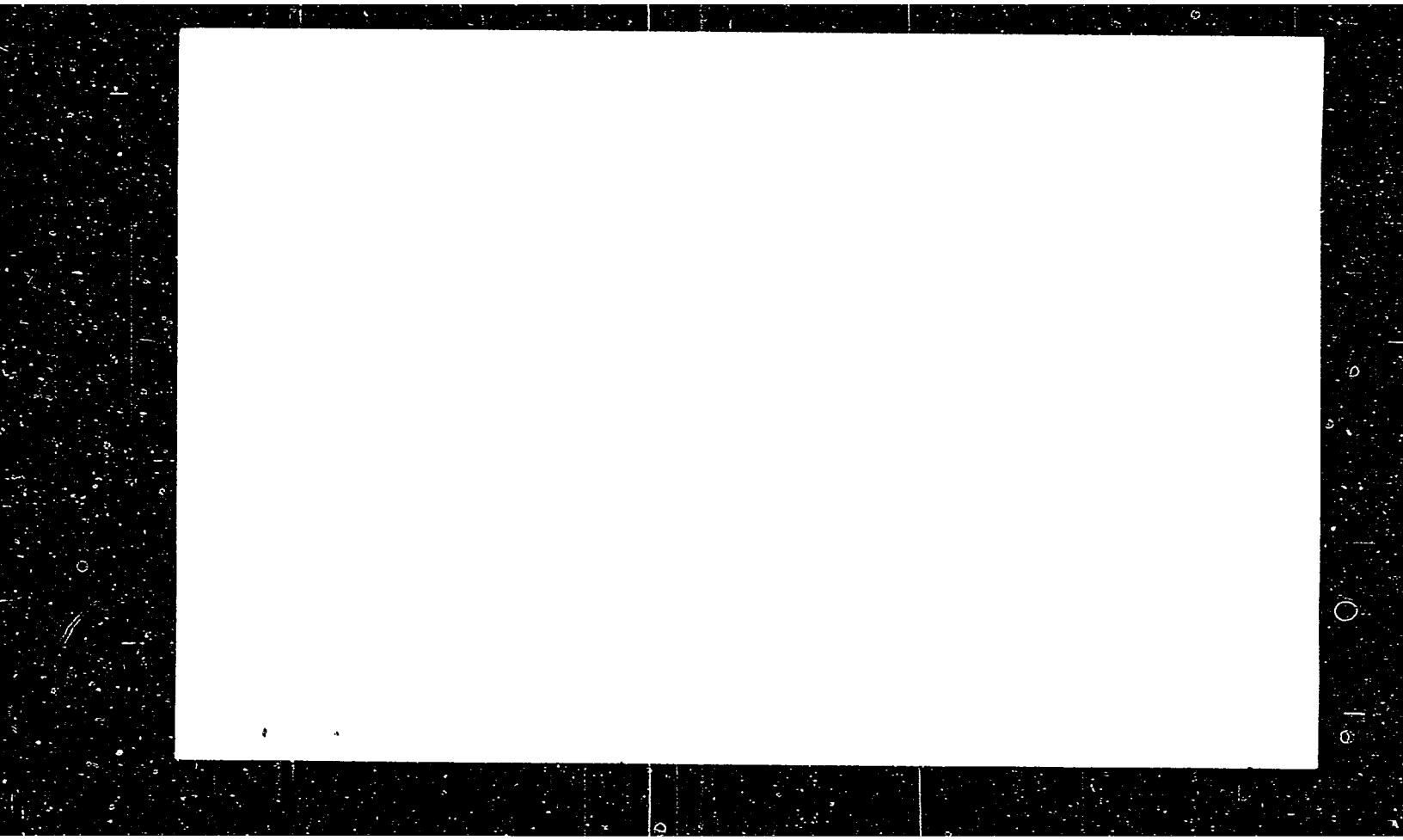
ABSTRACT: An enriched tin preparation [Sn^{112}(52,3 %), Sn^{114}(57,2 %)] was bombarded with 10 MeV deuterons. Two hitherto unknown activities with 7,0 ± 0,5 min and 31 ± 1 min half life were measured. In both cases the β^+-limiting energy (measured by the absorption method) amounted to 2 MeV.
Chemical separation of both activities showed that antimony isotopes were concerned. The probable reactions are $Sn^{112}(d,n)Sb^{113}$ and $Sn^{114}(d,n)Sb^{115}$.
The decay scheme is at present being further investigated.

SUBMITTED: September 4, 1958

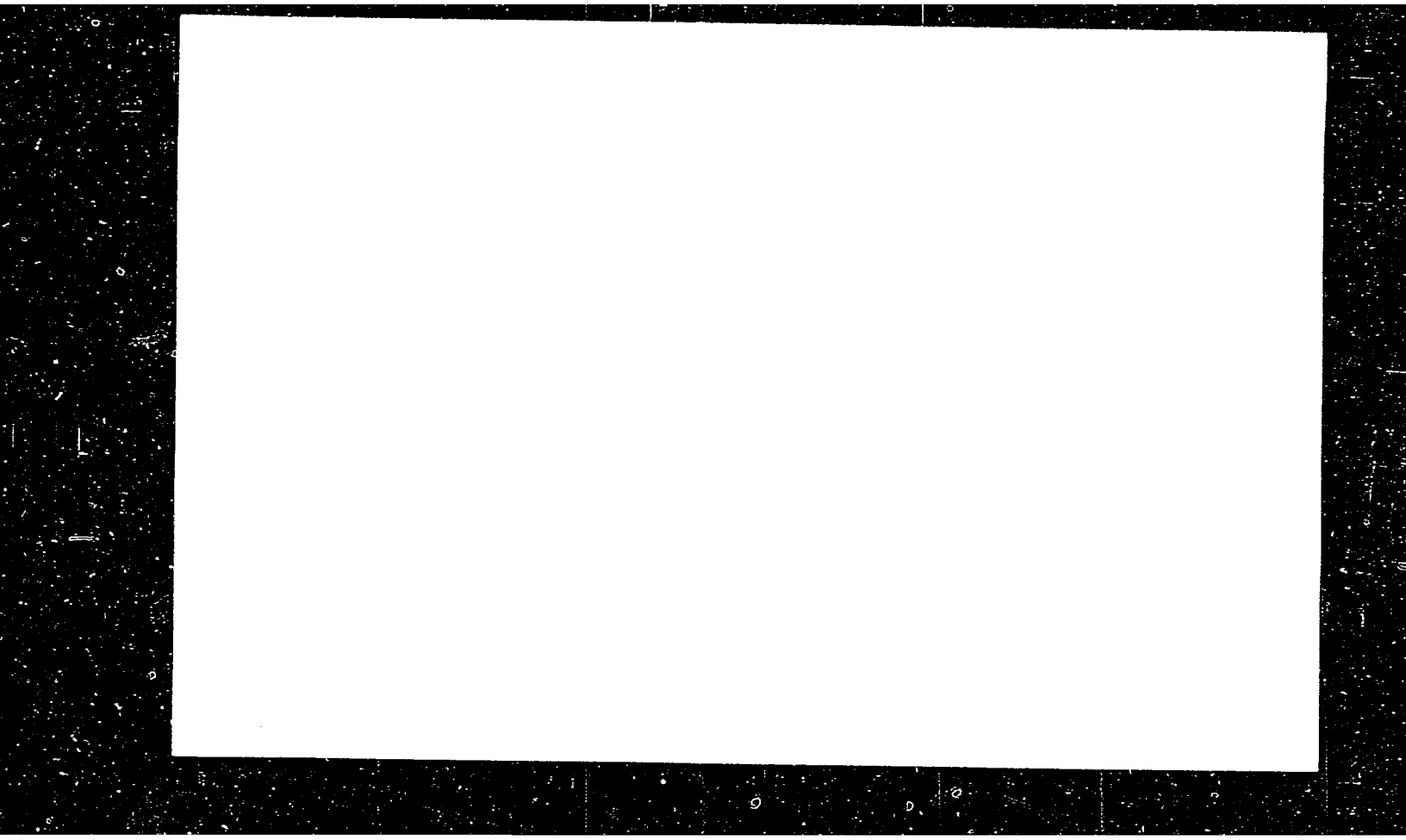
Card 1/2

New Isotopes of Antimony SOV/89-5-6-17/25

Card 2/2



APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000203710010-7"



APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000203710010-7"

BARONI, Ye.Ye.; SHONIYA, V.M.

Aggregate state of luminescent organic compounds in polystyrene. Part 2: Determination of the molecular weight of polymers. Vysokom. soed. 1 no.9:1285-1286 S '59. (MIRA 13:3)
(Styrene) (Luminescent substances)

21(4), 15(8) SOV/89-6-3-14/29

AUTHORS: Baroni, Ye. Ye., Shoniya, V. M.

TITLE: Production of Plastic Scintillators (Izgotovleniye plastmassovykh stsintillyatorov)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 3, pp 330-332 (USSR)

ABSTRACT: On the basis of earlier experience a new method was elaborated for the production of plastic scintillators by means of a thermal polymerization in a closed metallic container. Two different forms of containers were used, the cross sections of which are available (Figs.1,2). The inner surface of the mold is chromiumplated and mirror-finished. The discharge pipe which is soldered to the mold is in its upper part surrounded by a condenser coil (made of copper) for cooling styrene vapors and low-boiling polymers. In order to avoid the sticking of polystyrene to the walls they are rubbed with a flannel cloth which was steeped into a 1% mixture of pure anhydrous glycerin dissolved in pure alcohol. The purified styrene in which the luminescent admixtures are dissolved is poured into the mold which is then hermetically closed. The still present air is replaced by nitrogen. Polymerization is carried out by stepwise heating up to 140°C. At the same time the cooling

Card 1/2

water is switched on. In the course of 2 hours an exothermic reaction takes place. Temperature is then increased to 200°C. At this temperature polymerization is finished after 20 hours. After the end of the polymerization process the entire apparatus is slowly cooled down to 100°C. At 80°C the scintillator is after-treated in the mold during 6 hours. The technology described ensures homogeneous, colorless and cavity-free scintillators. Also in the light and in the air the polymerizates are stable. An additional mechanical treatment is not necessary. The fluoroscence properties can be learned from reference 3. There are 2 figures and 3 references, 2 of which are Soviet.

SUBMITTED: August 19, 1958

Card 2/2

E.3100

S/079/60/030/05/57/074
B005/B125

AUTHORS: Baroni, Ye. Ye., Kovyrzina, K. A.

TITLE: On p,p'-Diphenyl Stilbene

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 5, pp. 1670-1673

TEXT: To increase the efficiency of plastic scintillators in scintillation counters it proved to be expedient to add two luminescing organic compounds together. One of them acts as main activator, while the other is only added in small amounts and is used in the role of co-activator for shifting the fluorescence spectrum and for increasing the total effect of the scintillator. p,p'-Diphenyl stilbene is especially suitable for the co-activator (Refs. 1-5). The authors of the present report worked out a production process for this compound. Diphenyl served as initial product, which was converted into p-diphenyl aldehyde by carbonylation (Refs. 6, 7). This aldehyde yields p,p'-diphenyl benzoin in the benzoin condensation with sodium cyanide in an alcohol solution. For steric reasons these compounds cannot be reduced with the aid of the usual reduction process for the production of stilbene from benzoin (Refs. 9-11). The authors trace out

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On p,p'-Diphenyl Stilbene

S/079/60/030/05/57/074
B005/B125

a new method for the reduction of diphenyl benzoin in a hydrogen atmosphere with the aid of zinc dust and concentrated hydrochloric acid. With the use of usual zinc dust cis diphenyl stilbene forms in the form of white crystals. When, however, the reduction is carried out with amalgamated zinc dust trans diphenyl stilbene results in the form of greenish-yellow shiny flakes. These two geometric isomers differ in their fluorescences (Refs. 13-18). The absorption band of the cis form is found in shorter wave lengths; also its absorption maximum has a lower value than that of the trans form. Fig. 2 shows the absorption spectra of the two geometric isomers of the diphenyl stilbene in dioxane. Characteristic differences also appear in the fluorescences of the two isomeric forms in the crystalline state; the trans form fluoresces intensively blue, while the cis form shows an essentially weaker fluorescence, violet in color. In organic solvents both forms fluoresce violet; the intensity of the radiation is, however, here also greater in the case of the trans form. The trans form is more effective than the cis form in its characteristic as co-activator for scintillators. The results of the measurements with respect to this will be published separately. In heating in nitrobenzene the trans form of the diphenyl stilbene changes into the cis form. The same effect occurs

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On p,p'-Diphenyl Stilbene

S/079/60/030/05/57/074
B005/B125

also in the longer action of ultraviolet rays on crystals of the trans form. The synthesis of the two isomeric forms of the diphenyl stilbene is thoroughly described in the experimental section. There are 2 figures and 24 references, 3 of which are Soviet.

SUBMITTED: May 27, 1959

Card 3/3

BARONI, Ye.Ye.; KOVYRZINA, K.A.; ANDREYEVSHCHEV, Ye.A.

Synthesis of some Δ^2 -pyrazoline derivatives. Zhur.ob.khim. 30 no.6:2002-2008 Je '60. (MIRA 13:6)
(Pyrazoline)

21,5200

69139

AUTHORS: Baroni, Ye. Ye., Kovyrzina, K. A., Rozman, I. M., Andreyeshchev, Ye. Ye., Shoniya, V. M. (Sukhumi)

S/076/60/034/03/027/038
B005/B016

TITLE: Plastic Scintillators on a Polystyrene Basis. III

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol 34, Nr 3, pp 665-667 (USSR)

TEXT: The authors synthesized polystyrene scintillators with additions of various derivatives of pyrazoline, oxazole, and stilbene according to a standard method (cf Ref 2). The synthesis of some of these additions which have not yet been described in publications, and the influence exercised by the cis-trans-configuration of 1,3,4,5-tetraphenyl pyrazoline and p,p'-diphenyl stilbene upon the intensity of luminescence of the scintillators will be dealt with in a separate paper. The intensity of luminescence of standard samples of the scintillators synthesized (16 mm diameter, 10 mm height) on excitation by β-radiation of a $Ce^{144} - Pr^{144}$ preparation was measured photoelectrically on an FEU-29 photomultiplier. No corrections were considered for the spectrum of luminescence radiation, for self-absorption etc. Thus, the results obtained characterize directly the efficiency of scintillators combined with a photomultiplier. Table 1 presents the results obtained for the following luminescent additions: 22 derivatives of Δ^2-pyrazoline, 3 derivatives of 1,3-oxazole, 1 derivative of oxazolone, and 2 derivatives of stilbene. The efficiency of stilbenes mixed with p-terphenyl

Card 1/3

was also studied. For each of the additions investigated the table gives the concentration the addition of which causes maximum luminescence of the scintillator, furthermore, the relative efficiency on direct excitation of the addition by ultraviolet radiation, and finally the wavelength on which the maximum of the emission spectrum is found. All these values are given without corrections. The efficiency of an addition is directly proportional to the quantum yield in fluorescence and depends on the agreement between the luminescence spectrum and the spectral sensitivity of the photomultiplier. The efficiency of the scintillator further depends on the extent of excitation energy transfer from the polystyrene to the addition. Among the additions listed in table 1 there are some causing a very high scintillator efficiency, which may therefore be recommended for the manufacture of scintillators. The authors also investigated the applicability of some of the above-mentioned additions to the shifting of the spectrum in polystyrene scintillators. Table 2 shows the relative efficiency of 4 derivatives of Δ^2-pyrazoline and of 2 derivatives of stilbene with respect to the shifting of the spectrum in polystyrene scintillators. The measurements were also carried out by means of an FEU-29 photomultiplier. The concentration of the additions in these experiments was 0.001 g/g. There are 2 tables and 3 Soviet references.

Plastic Scintillators on a Polystyrene Basis. III

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S/076/60/034/03/027/038
B005/B016

SUBMITTED: May 28, 1959

Card 3/3

27700
S/120/61/000/003/010/041
E073/E335

24 3500

AUTHORS: Baroni, Ye.Ye., Kilin, S.F., Kovyrzina, K.A., Rozman, I.M. and Shoniya, V.M.

TITLE: On the Duration of the Light-emission of Plastic Scintillators

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No. 3, pp. 72 - 74

TEXT: The results are described of measurements of the light-emission time of the relative yield of luminescence for a number of plastic scintillators based on polystyrene and polyvinyltoluol. The measurements were made by means of an X-ray phase fluorimeter. The data permit estimating the "suitability" of plastic scintillators in "high-speed circuits". The measured "fluorimetric times" are tabulated for plastic scintillators with a single luminescent addition. It was found that the times were particularly low for scintillators made of di- and triphenyloxazole, diphenyloxodiazole and n-terphenyl. Of the investigated scintillators the largest H/τ value was obtained for scintillators with n-terphenyl, the

Card 1/4

optimum concentration being 4 g per 100 g of monomer. The dependence of H/τ on the polymerisation conditions of polyvinyltoluol showed an unexplained decrease in τ in the case of polymerisation at 200 °C. The fluorimetric time for polyvinyltoluol equals 13.5 nanosecs for a polymerisation time of 120 hours at 170 °C and 11.5 nanosec for 30 hours polymerisation at 200 °C. Spectrum mixing agents bring about an increase in H owing to a decrease of the self-absorption in the basic addition and lead to a better correspondence of the emission spectra with the spectral sensitivity of the photo-electron multipliers. However, the value of τ also increases simultaneously. The rôle of the spectrum-mixing agents 4P, PPS and StS consists basically of the transformation of the short-wave part of the illumination spectrum 3P into a proper emission spectrum. Thereby, the influence of reabsorption in the 3P itself on the external magnitude of the scintillation and on the duration of the light emission is excluded. The obtained data show that as regards the speed of the response (H/τ) some plastics are superior to stilbene. Table 4 shows

On the Duration of ....

the comparative values; all the plastic scintillators had a diameter of 28 mm, height of 25 mm with a MgO reflector and H_γ was measured by means of a photomultiplier ФЭУ-29 (FEU-29). There are 4 tables and 8 references: 5 Soviet and 3 non-Soviet. The two English-language references quoted are: Ref. 1 - R.K. Swank, W.L. Buck - Rev. Scient. Instrum., 1955, 26, 15; Ref. 2 - R.C. Sangster, J.W. Irvine - J. Chem. Phys., 1956, 24, 670.

SUBMITTED: June 21, 1960

Card 3/4

5.4500 2209

29613
S/120/61/000/004/024/034
E202/E592

AUTHORS: Andreyeshchev Ye A Baroni Ye Ye Kursanova N S and Rozman I M

TITLE: Press-moulded plastic phosphors with organo-metallic additives

PERIODICAL: Pribory i tekhnika eksperimenta no 4 1961 151

TEXT: The authors observed the inherent loss of luminescence in scintillating plastic phosphors prepared in the orthodox way by dissolving the organo-metallic compounds together with the luminescent additives in a monomer and subsequently polymerising the whole mixture. Instead the authors introduced successfully organo-metallic and organo-semimetallic compounds into plastic phosphors at the stage of press moulding. The experiments were based on a plastic phosphor derived from the polymerisation of styrene with 3% p-terphenyl and 0.04% 1.3.5-triphenyl-2-pyrazoline. Powder mixtures of the above were compounded with each of the following: $Pb(C_6H_5)_4$, $Hg(C_6H_5)_2$, $Sn(C_6H_5)_4$ and $As(C_6H_5)_3$ and were press-moulded for 3 hours at 125-130°C at a pressure of 2.5 kg/cm^2 in a split metallic mould in the absence of inert gas. Since the

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Press-moulded plastic phosphors

melting points of the first two additives were above the moulding temperature the resulting phosphors were turbid whereas the remaining two additives gave rise to transparent phosphors The luminescence of the above phosphors was measured from the mean current of a photomultiplier exposed to β-particles and it was found that a very strong quenching of luminescence occurred in phosphors with Hg and As compounds This was attributed to the relatively easy formation of phenyl radicals and their interaction with the agents responsible for luminescence On the other hand relatively low quenching of lead and tin compounds was explained by the absence of phenyl radicals The lowest loss of luminescence was observed with the tin compound additive viz 5% w/w of Sn, in the phosphor reduced the relative luminescence output to 60%. All samples were 4 mm thick and 36 mm in diameter There are 1 table and 3 references: 2 Soviet and 3 non-Soviet The English-language reference reads as follows: [illegible] J Chem Phys 1957, 27, 801, ref 4 M Hyman J [illegible] IRE Trans Nucl Sci 1958 NS-5 No 3 87

SUBMITTED September 29 1960

[Abstractor's Note: The word "organoelemental" is a neologism, it

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Press-moulded plastic phosphors

29613
S/120/61/000/004/024/034
E202/E592

is more than justified to forego the semi-metallic character of As and treat the whole group as organo-metallic]

X

Card 3/3

25257 S/190/61/003/007/001/021
B101/B208

18550

AUTHOR: Baroni, Ye. Ye.

TITLE: Structure of plastic scintillators. III. Investigation of the temperature dependence of the refractive index and determination of the temperature transitions

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 7, 1961, 956-959

TEXT: It was the purpose of the present study to obtain new data on the state of the luminescent admixtures in polystyrene scintillators by measuring the refractive index at different temperatures. Polystyrene samples were prepared by the standard method (thermal polymerization without initiator), which contained the following luminescent substances as admixture (in % by weight) p-terphenyl (3%); p-terphenyl (3%) + 1,2,5-triphenyl-Δ^2-pyrazoline (0.02%); p-terphenyl (3%) + 1,1,4,4-tetraphenyl butadiene (0.06%); 1,1,4,4-tetraphenyl butadiene (3%); 2,5-diphenyl oxazole (1.3%) or anthracene (3%). The disklike samples (diameter 10 mm, thickness 1 or 10 mm) were polished and the refractive index was measured on an Abbe refractometer, the temperature being adjusted by means of a [illegible]-15[illegible] (TS-15M)

Card 1/5

thermostat. K_2HgI_4 was used as contact liquid between sample and refractometer prism. The following results were obtained: 1) Independent of the concentration of the admixture a salient point appears at +73.5°C in the temperature curves of the refractive index (also in pure polystyrene). This point corresponds to the transition of the second kind already described by R. H. Wiley and G. M. Brauer (see below), and is due to the presence of low-molecular fractions. 2) A second, weaker salient point was observed at +90°C. It corresponds to the vitrification temperature in agreement with the data by Yu. S. Lipatov, V. A. Kargin, G. L. Slonimskiy (Zh. fiz. khimii, 32, 131, 1958) and M. L. Williams (see below). 3) The melting point was 119-120°C, 4) the effect of the admixture concentration of the refractive index is illustrated in Fig. 2. The refractive index increases linearly with increasing admixture concentration, the most in the case of 2,5-diphenyl oxazole. This is explained by the specific volume of the oxygen atom of this compound. The deviation from linearity in 1,1,4,4-tetraphenyl butadiene is considered to be due to copolymerization of this compound with styrene. 5) The density of pure polystyrene was 1.0376±0.0005, that of polystyrene with admixture

was somewhat higher. 6) If pure polystyrene is polymerized at 200°C, the refractive index changes, depending on the time of polymerization (Fig.3). A competition between polymerization and depolymerization processes is assumed to be the cause. All polymers with admixture show an increasing molecular weight as compared with the initial molecular weight which was determined immediately after preparation (ca 70,000 - 80,000). There are 3 figures and 15 references: 9 Soviet-bloc and 6 non-Soviet-bloc. The 3 most important references to English-language publications read as follows: R.H. Wiley, G.M. Brauer, J. Polymer Sci., 3, 455, 1948; R.S. Spencer, R.F. Boyer, J. Appl. Physics, 17, 398, 1946; M.L. Williams, J. Phys. Chemistry, 59, 95, 1955

SUBMITTED: March 7, 1960

Card 3/5

25258 S/190/61/003/007/002/021
B101/B208

5.4600

AUTHOR: Baranov, Ye. Ye.

TITLE: Polystyrene damage by ionizing radiation

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, [illegible], 1961, 960-965

TEXT: The purpose of the present paper was to study the effect of [illegible] and β-radiation on polystyrene, particularly on polystyrene [illegible] luminescent admixtures [illegible] 5% tetraphenyl butadiene. A survey is given on the data available with respect to the effect of ionizing radiation on polystyrene. It may be seen from it that in the absence of oxygen (in the interior of polystyrene) condensation reactions, in the presence of oxygen (on the surface of polystyrene) oxidation reactions take place. Polystyrene obtained by thermal polymerization without initiator at 200°C, 10 hr, in nitrogen atmosphere, was irradiated with [illegible] Ce^{144}-Pr^{144}. The irradiation time was between 17 and 110 days. The following results were obtained: 1) the luminous power of all polystyrene [illegible] is decreased by irradiation. 2) The oxidation of the polystyrene surface was qualitatively confirmed. An attempt was made to find peroxides by

Card 1/3

25258 S/[illegible]/002/021
P'O'/3226

Polystyrene damage by ...

a) KI in starch solution in the presence of molybdate, b) detection of perchromate from chromate, c) oxidation of the tine reagent $TiCl_3$ and acetyl acetone. Even after an irradiation of 150 days, the presence of peroxides could not be definitely proven. Aldehydes, however, were found by the color reaction with diazobenzene sulfonic acid, the presence of sodium amalgam, and carboxyl groups chromatographically by 2,4-dichlorophenol-indophenol. 3) Microscopic examination of the samples irradiated discloses the formation of cracks and gas bubbles. Size and number of cracks was related to the time of irradiation, especially to β irradiation. 4) In the samples irradiated with α-particles the surface layer was better soluble in alcohol and benzene than the principal mass of polystyrene. 5) The oxygen absorption from the air on irradiation with Sr^{90} + Y^{90} could be confirmed by means of a mercury capillary manometer by volume decrease of the air included in a container together with the sample. There are 2 figures, 1 table, and 36 references: 4 Soviet-bloc and 32 non-Soviet-bloc. The four most important references to English-language publications read as follows: P. Yen Hsiung-feng, J.W. Kennedy, J. Amer. Chem. Soc., 77, 947, 1955; J. Weiss, J. Polymer Sci., 20, 125, 1958; J.C.

Card 2/3

25258 S/190/61/003/007/002/021
B101/B208

Polystyrene damage by ...

Errington, D.E. Eaves, Nature, 175, 1112, 1956; J.F. Fowler, M.J. Day, Radiobiology, 12, pp. 42, 52, 1955.

SUBMITTED: April 3, [illegible]

Card 3/3

ALEKSANDRIYA, B.V.; BARONI, Ye.Ye.; SHVANGIRADZE, R.R.

Electron diffraction study of a plastic scintillator. Vysokom.soed. 3 no.8:1285 Ag '61. (MIRA 14:9)
(Scintillation counters)

ANDREYEVSHCHEV, Ye.A.; BARONI, Ye.Ye.; KURSANOVA, N.S.; ROZMAN, I.M.

Compressed plastic scintillators with additives of organic compounds of metals. Prib. i tekh.eksp. 6 no.4:151 Jl-Ag '61. (MIRA 14:9)

(Scintillation counters)

S/079/61/031/002/016/019
B118/B208

AUTHORS: Baroni, Ye. Ye. and Kovyrzina, K. A.

TITLE: Formylation reaction of Δ^2-pyrazoline derivatives

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 2, 1961, 627-628

TEXT: There is only a limited number of methods of introducing the aldehyde group into heterocyclic compounds. Gattermann's reaction (Ref. 1) was used to some extent, but gives only poor yields and meets with certain experimental difficulties. A direct formylation in the heterocyclic series was first performed by W. I. King and F. F. Nord (Ref. 2) who used methyl formanilide and phosphorus oxychloride as formylating agents. In Ref. 3, A. W. Weston used ethyl formanilide for this purpose. In 1948, dimethyl formamide has been patented as effective agent for the formylation of aromatic tertiary amines (Ref. 4). F. T. Tyson and I. T. Shaw (Ref. 5) used dimethyl formamide, and obtained 3-indolyl aldehyde in a 72% yield. This formylating agent differs from methyl formanilide by its comparatively low costs and high efficiency. In recent years, the aldehyde group could be converted to thiophene (Ref. 6), to some pyrazole (Ref. 7), furan (Ref. 8), and pyrrol deriva-

Formylation reaction ...

tives (Ref. 9) by dimethyl formamide. The authors formylated 1.5-diphenyl-Δ^2-pyrazoline with dimethyl formamide. The introduction of the aldehyde group into Δ^2-pyrazolines offers new possibilities of synthesizing luminescent heterocyclic compounds. Direct formylation of Δ^2-pyrazolines with dimethyl formamide is of practical interest owing to simple reaction and good yield. Formylation is best carried out with a sixfold excess of dimethyl formamide at a temperature of between 95 and 100°C. Higher temperature (125-130°C), and reduction of the amide quantity results in lower yields and gives resinous products, even causes carbonization. There are 8 references: 2 Soviet-bloc and 8 non-Soviet-bloc.

SUBMITTED: February 29, 1960

Card 2/2

BARONI, Ye.Ye.; KOVYRZINA, K.A.

Synthesis of luminescent heterocyclic compounds. Zhur.ob.khim. 31 no.5:1641-1643 My '61. (MIRA 14:5)
(Heterocyclic compounds) (Luminescent substances)

43245
S/844/62/000/000/107/129
D408/D307

AUTHOR: Baroni, Ye. Ye.

TITLE: Concerning the damage of polystyrene by ionizing radiation

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 629-633

TEXT: The reactions occurring when polystyrene is irradiated with α and β rays in the presence of atmospheric oxygen were investigated, using compounds of Po^{210} and of Ce^{144}-Pr^{144} as the radiation sources. No difference was observed in the behavior of pure polystyrene and polystyrene adulterated with luminescent materials when irradiated. Surface layers of the polymer were oxidized during irradiation, and inside the sample, where oxygen and moisture were absent, condensation into three-dimensional products occurred. Peroxides, aldehydes and carboxylic acids were detected in the oxidized portions. Microscopic examination revealed the formation of cracks, along which minute gas bubbles frequently accumulated, inside the polymer.

Card 1/2

Concerning the damage ...

S/844/62/000/000/107/129
D408/D507

An apparatus consisting mainly of a capillary tube, containing a mercury thread, attached to a glass ring, in which the radiation source and the polymer sample were located, was used to determine the amount of oxygen absorbed by the sample under the action of β radiation. There are 2 figures and 1 table.

Card 2/2

S/120/62/000/005/036/036
E075/E436

AUTHORS: Baroni, Ye.Ye., Petrova, N.P.

TITLE: Zone melting of organic compounds on a microscale

PERIODICAL: Pribory i tekhnika eksperimenta, no.5, 1962, 198-199

TEXT: Small quantities (1.0 to 1.5 g) of anthranilic acid, diphenyl, anthracene, o-nitrotoluene, p-bromophenol, benzophenone, succinic acid, adipic acid, p-bromoaniline, anthraquinone, thymol, acetanilide and p-anizidine were purified by zone melting in glass ampules 7 to 7.5 mm in diameter and 100 mm length. The ampules were 2/3 filled with the compounds and vacuum sealed. They were passed at the rate of 0.2 or 0.4 mm/min through a furnace consisting of four zones of heating (discs 12 mm thick) and three consecutively placed cooling zones (4 mm thick) separated from the heating zones with asbestos. The method was applied to prepare pure substances for the investigation of luminescent properties of additives in plastic scintillators. There is 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN GruzSSR
(Physico-technical Institute AS Georgian SSR)

SUBMITTED: January 22, 1962
Card 1/1

S/063/62/007/005/005/006
A057/A126

AUTHORS: Kovyrzina, K.A., Radaykina, L.A., Baroni, Ye.Ye.

TITLE: Synthesis of 5-stilbenyl-1,3-diphenyl- Δ^2-pirazoline

PERIODICAL: Zhurnal vsesoyuznogo khimicheskogo obshchestva imeni D.I. Mendeleyeva, v. 7, no. 5, 1962, 592 - 593

TEXT: A method for the synthesis of 5-stilbenyl-1,3-diphenyl- Δ^2-pirazoline (II) from n-3-[1-phenylpropenone-(1)]-stilbene (I) is described. The investigation was carried out in order to synthesize a new luminescent heterocyclic compound with high efficiency as an admixture to plastic scintillators, having a pronounced fluorescence in the range of about 4,500 Å. Compound (I) is prepared by condensation of stilbenaldehyde with acetophenone: 1.6 g stilbenaldehyde is dissolved in 110 ml alcohol, 1.8 g acetophenone and 1 ml 10% NaOH added, the turbid solution left to stand at room temperature for two days, and afterwards the precipitated (I) is filtered off, washed, dried, and recrystallized with acetone. The final product (II) is prepared by dissolving 4.2 g (I) in 700 ml of an alcohol/benzene mixture (6 : 1), subsequent addition of 2.1 ml freshly distilled phenylhydrazine, 2.1 ml conc. HCl and the condensation is carried out at 90 - 95°C during 28 h

under stirring. After washing of the precipitate and recrystallization, (II) is obtained with a 96% yield, showing an absorption spectrum in dioxane ($C = 10^{-3}$ mole/l) with $\lambda_{max.}$ 3,100 Å ; $\epsilon = 63,400$; $\lambda_{max.}$ 3,600 Å ; $\epsilon = 20,992$.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN GruzSSR (Physico-Technical Institute AS GruzSSR)

SUBMITTED: January 25, 1962

L 18742-63 EWT(m)/BDS ASD

ACCESSION NR: AT3002206 S/2941/63/001/000/0128/0131

AUTHORS: Andreyeshchev, Ye. A.; Barcni, Ye. Ye.; Viktorova, V. S.; Kovy*rzina, K. A.; Rozman, I. M.; Shoniya, V. H.

TITLE: Excitation energy transfer in solid solutions of organic substances. 2

SOURCE: Optika i spektroskopiya; sbornik statey. v. 1: Lyuminestsentsiya. Moscow, Izd-vo AN SSSR, 1963, 128-131

TOPIC TAGS: phosphorescence, donor, acceptor, induction resonance

ABSTRACT: Phosphorescent quenching of the donor energy and the excitation energy transfer from donor to acceptor were studied in several organic substances. The solvents and solutes are listed. The experimentally determined radiationless transfer parameter p_t (defining optical characteristic of the donor and acceptor molecules and the dielectric property of the media) was found to be consistently higher (about 1.8 times) than the value determined analytically by the induction resonance theory. Orig. art. has: 3 figures, 3 tables, and 3 formulas.

ASSOCIATION: none

Card 1/2

L 18743-63 EPR/EWP(j)/EPF(c)/EWT(m)/HDS ASD Ps-4/Pc-4/Pr-4 RM/ 73
ACCESSION NR: AT3002207 WW/MAY S/2941/63/001/000/0131/0135

AUTHORS: Andreyeshchev, Ye. A.; Baroni, Ye, Ue.; Rozman, I. M.; Shoniya, V. M.

TITLE: Excitation energy transfer in solid solutions of organic substances. 3

SOURCE: Optika i spektroskopiya; sbornik statey. v. 1: Lyuminestsentsiya. Moscow, Izd-vo AN SSSR, 1963, 131-135

TOPIC TAGS: phosphorescence, donor, induction resonance

ABSTRACT: The quantum phosphorescent yield of tetraphenylbutadiene in polystyrene was measured as a function of diviphenyl ethylene concentration. The concentration of diviphenyl ethylene varied from 0.0089-2 gm/100gm of polystyrene. As in previous solid solutions investigated by the same authors (Optica i spektroskopiya. Sbornik 1, 1963, str. 128) and by I. M. Rozman (Opt. i. spectr., 10, 354, 1960), the phosphorescent quenching energy of the donor agrees fairly closely with the induction resonance theory but the energy transfer parameter deviates by a factor of 1.8 from theoretical predictions. Orig. art. has: 5 formulas, 2 figures, and 2 tables.

Card 1/2

BARONI, Ye.Ye.; KOVYRZINA, K.A.

Synthesis of diphenyl- and terephenyldipyrazolinyls. Zhur.ob. khim. 33 no.2:583-586 F '63. (MIRA 16:2)

1. Fiziko-tekhnicheskiy institut AN Gruzinskoy SSR.
(Pyrazoline)

BARONI, Ye.Ye.; KOVYRZINA, K.A.

Synthesis of di-Δ^2-pyrazolines. Zhur.ob.khim. 33 no.3:959-963 Mr '63. (MIRA 16:3)
(Pyrazoline)

EWP(j)/EWT(l)/EWT(m)/BDS--AFFTC/ASD--Pc-4--RM
L 11218-63
ACCESSION NR: AP3001632 S/0192/63/004/003/0459/0460

64
63

AUTHOR: Baroni, Ye. Ye.; Ksenofontov, V. A.; Kucheryayev, A. G.; Oliferchuk, N. L.; Shuander, Yu. A.

TITLE: Nuclear magnetic resonance of scintillators based on polystyroles

SOURCE: Zhurnal strukturnoy khimii, v. 4, no. 3, 1963, 459-460

TOPIC TAGS: NMR of protons, polystyrole and plastic scintillators

ABSTRACT: This study shows an experimental determination of some features of NMR in the polystyrole and plastic scintillators based on polystyrole which could be utilized for the study of structural properties. It was established that the NMR proton spectrum in the polystyrole and polystyrole with added scintillating substances at temperatures higher than 20-30C consist of two components: wide with DELTA H approximately equals 6.7 gauss and the narrow with DELTA H approximately equals 0.35 gauss. The amplitude of the narrow polystyrole component shows a temperature dependence at about 120C. With the introduction of luminescent materials the transition point is shifted into the region of lower temperatures. The wide component shows a transition of polystyrole at a temperature of approximately 75

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L 11218-63
ACCESSION NR: AP3001632

and 120C. The introduction of scintillating materials shifts the point of transition to lower temperatures. Small additions up to 3% do not affect the transition at 75C. The NMR method may find its usefulness in the determination of a known concentration added to the polystyrole by means of shifting the transition points determined from the temperature dependence of the amplitude of the narrow component at the appropriate temperature. "The authors express their gratitude to V. M. Shoniya for the preparation of polystyrole and the scintillators in its base for these investigations." Orig. art. has: 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN Gruz SSR (Physico-Technical Institute, Gruz SSR)

SUBMITTED: 29Jan62 DATE ACQ: 01Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 001 OTHER: 001

Card 2/2

ANDREYESHCHEV, Ye.A.; BARONI, Ye.Ye.; VIKTOROVA, V.S.; KOVYRZINA, K.A.; ROZMAN, I.M.; SHONIYA, V.M.

Chemical transformation during polymerization investigated by means of absorption spectra. Vysokom. soed. 5 no.10:1482-1484 O '63. (MIRA 17:1)

L 20047-65 EPF(c) HG(j)/EWA(h)/EWP(j)/EWT(m)/EWA(l) Pc-4/Pr-4/Peb
SED/AFWL/ASD(m)-3/AFMD(c) RM/DM
ACCESSION NR: AP5001272 S/0089/64/017/006/0497/0500

AUTHOR: Baroni, Ye. Ye.; Kilin, S. F.; Lebsadze, T. N.; Rozman, I. M.; Shoniya, V. M.

TITLE: Introduction of organoelemental compounds in polystyrene

SOURCE: Atomnaya energiya, v. 17, no. 6, 1964, 497-500

TOPIC TAGS: polystyrene, organoelemental compound, copolymerization, shielding material, luminescent additive, scintillation counter

ABSTRACT: Materials for γ-radiation and for neutron shielding and scintillation counters have been synthesized by high-temperature copolymerization of styrene with tetraphenyl lead, diphenylmercury, tetraphenyltin, triphenylarsen, triphenylbismuth, or diphenylselenium. Scintillators were prepared by introduction into styrene of such luminescent additives as terphenyl. The copolymerization conditions of materials containing 12% Pb, 19% Bi, 33% Hg, 12% As, 11% Sn, or 10% Se are described in detail, and the results of measurements of the quantum efficiency of scintillators containing Pb, Hg, or Sn are given. Orig. art. has: 4 tables.

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L 20050-65
ACCESSION NR: AP4049535

2

stably at all power levels including the maximum (90 MW). The total icebreaker power of 44,000 hp was provided by three reactors operating simultaneously at 65 MW each. Each reactor produced 360 tons steam per hour at 28 kg/cm^2 and 300--310C. The operational and neutron-physics characteristics of the reactors, the procedures used to reload the reactors, and the training of personnel are described in some detail. It is concluded that the atomic equipment of the icebreaker operated satisfactorily in all respects. "The experimental neutron-physics characteristics of the active zones of the reactors were obtained by the co-workers N. A. Lazukova and A. K. Sledzyuka." Orig. art. has: 10 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 003

OTHER: 000

Card 2/2

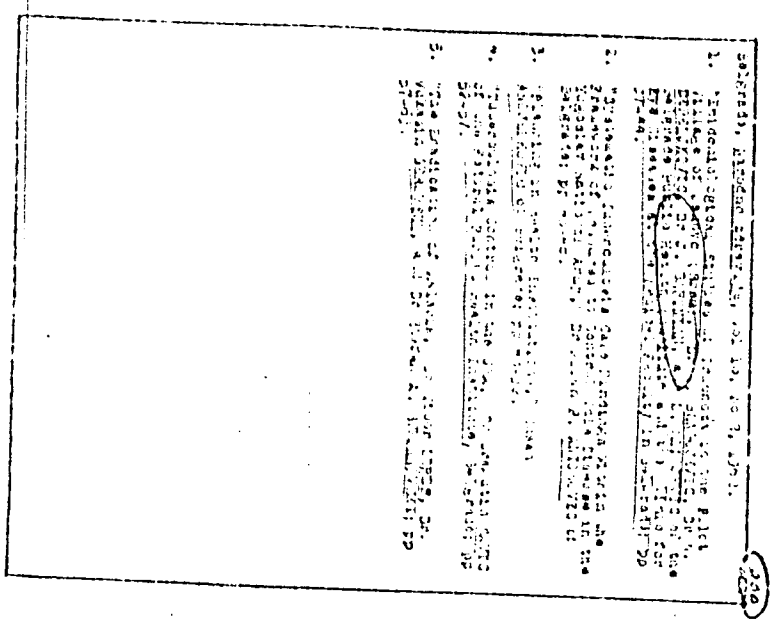
BARONI, Ye.Ye.; KOVYRZINA, K.A.; TSVETKOVA, T.A.

P,P'-Diphenylstilbene. Part 3. Zhur.org.khim. 1 no.3:513-515 Mr '65. (MIRA 18:4)

VASIL'YEVA, M.G.; LAIYKINA, V.M.; MAKHARASHVILI, K.A.; SOKOLOVA, A.L.; SOYFER, V.M.; TSKIRIYA, K.G.; BARON, Ye.Ye., doktor khim. nauk, red.

[Analysis of boron and its inorganic compounds] Analiz bora i ego neorganicheskikh soedinenii. Pod red. E.E.Baroni. Moskva, Atomizdat, 1965. 267 p. (MIRA 19:1)

BARONIAN, J. (DR.)



(13)

CAVKA,V.,prof. dr.; BARONIJAN,J.,dr.

Use of alpha-chymotrypsin-A "zolulase" in cataract surgery.
Med. glasn. 13 no.5:321-325 My '59.

1. Oftalmoloska klinika Medicinskog fakulteta u Beogradu, upravnik: prof. dr. V. Cavka.
(CATARACT EXTRACTION)
(CHYMOTRYPSINS ther.)

AUTHOR: Baronin, S. P., Member of the Society (see Association) S/108/63/018/003/005/008/ D201/D308

TITLE: A method of improving the interference-killing properties of telephone communication

PERIODICAL: Radiotekhnika, v. 18, no. 3, 1963, 30-36

TEXT: The author considers a telephone communication distorted by a fluctuating or periodic noise and analyzes a method of increasing its interference-killing properties. Since speech is a non-stationary process, the method consists in applying a filter with variable parameters. The filter gives a minimum mean square error, follows the statistical properties of both signal and noise, and results in the receiving signal becoming more suitable for reception. The method of designing the filter parameters and the bloc diagram of the filter with the required frequency characteristic is given. The effectiveness is analyzed

Card 1/2

and means of its improvement discussed. The formulas derived may be applied to white noise and interferences with other spectral distribution, and show that in all cases the use of variable parameters filter results in better intelligibility of speech. There are 2 figures.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A. S. Popova (Scientific and Technical Society of Radio Engineering and Electrical Communications im. A. S. Popov)

SUBMITTED: July 19, 1961 (initially)
February 22, 1962 (after revision)

BARONIK, V.N.; BOTIN, Yu.P.; VERKHOVSKIY, B.I.; IVANOV, A.I.; PERL'MAN, S.M.; PRAGER, I.A.; KHARLAKOV, V.A.; SHELKOV, L.S.

Crystalless X-ray spectrometer with stabilization of the position of the amplitude of the spectrum of a proportional counter. Zav. lab. 30 no.4:498-500 '64. (MIRA 17:4)

1. Konstruktorskoye byuro "TSvetmetavtomatika".

14(6) SOV/112-59-5-8746

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 5, p 47 (USSR)

AUTHOR: Baronin, V. V.

TITLE: Studying Velocity Pulsation in the Bottom Layer of the Stream in the Tailwater Bed of a Hydraulic Structure That Has Energy Dissipators in the Form of Two Rows of Baffles

PERIODICAL: Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1958, Nr 1-2, pp 95-101

ABSTRACT: Experiments were conducted in a vitrified concrete chute. The baffles were staggered in two rows with the head face placed at 45°. Baffle heights and their distance from the contracted section were varied. Velocities were measured by cinema filming, using the Minskiy and Fidman's method. It was found that the pulsation energy in the bottom layer is dissipated downstream from the dissipators over a distance of 20-25 critical depths. The root-mean-square values of longitudinal pulsation velocities are as low as $(0.04-0.10) \cdot U_{sr}$

Card 1/2

Studying Velocity Pulsation in the Bottom Layer of the Stream in the Tailwater . . . .

at this distance, while they are as high as (0.12-0.3) · U_{sr} at the dissipators. The maximum bottom velocities fall off from (1-1.6) · U_{sr} down to (0.2-0.5) · U_{sr} respectively. Without dissipators, maximum velocities are 1.5-2 times higher. Placing the dissipators closer to the contracted section is considerably more efficient than placing them at the apron's end. Bibliography: 3 items.

I.I.O.

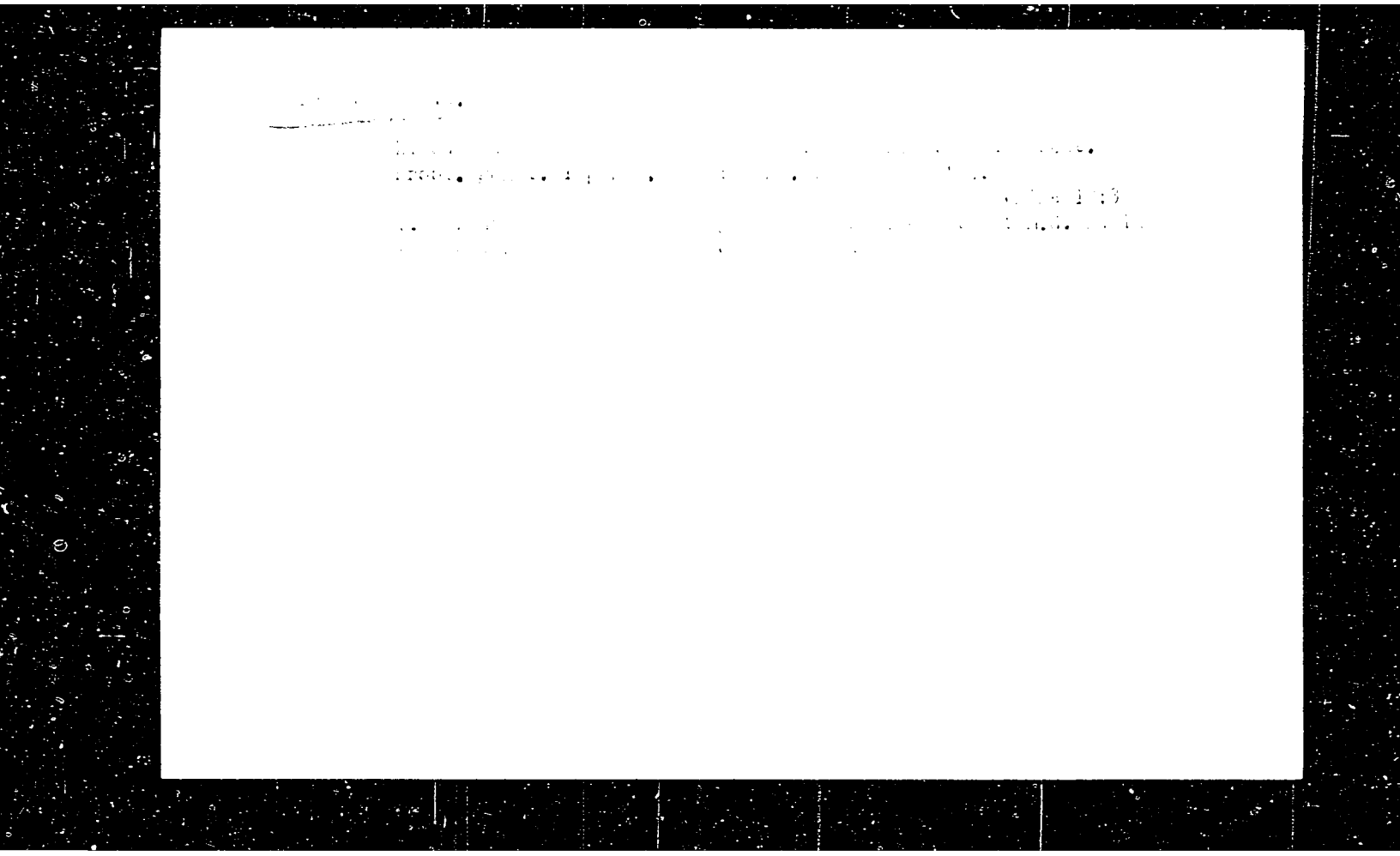
Card 2/2

BARONIN, V. V., Candidate Tech Sci (diss) -- "Investigation of the dispersion of energy and erosion of the river bed below the water level in hydraulic structures equipped with energy dampers in the form of 'knives' and aprons". Leningrad, 1959. 14 pp (Min Higher Educ USSR, Leningrad Polytech Inst im M. I. Kalinin), 150 copies (KL, No 24, 1959, 134)

[illegible], [illegible]

[illegible] of the blood [illegible] system in patients with [illegible] skin cancer in the course of radiotherapy. Med. rad. 9 [illegible] D '64. (MIRA 18:12)

1. Kafedra propedevticheskoy [illegible] (zav. - dotsent N.G. [illegible]) Ternopol'skogo meditsinskogo instituta.



BARONINA, L.A.

Changes in the blood coagulation system of patients with breast cancer following radiotherapy. Vop. onk. 11 no.12: 31-34 '65. (MIRA 19:1)

1. Kafedra propedevtiki vnutrennikh bolezney (zav. - prof. M.G. Masik) Ternopol'skogo meditsinskogo instituta (rektor - dotsent P.Ye. Ogiy).

BARONKIN, A.K., inzhener.

Twenty-meter tower for use in building repair. Mekh.stroi. 11 no.6:29 Je '54. (MLRA 7:6)
(Building machinery)

BARONKIN, V.S.

Remote control of two amplifying channels using a single connecting line. Vest. sivazi 20 no. 12:9-10 D '60.
(MIRA 13:12)

1. Starshiy inzhener Moskovskoy gorodskoy radiotranslyatsionnoy seti.
(Radio stations) (Remote control)

BARON, S.G.; GREBENNIKOV, V.V.; LYUBINSKIY, N.M.; TSEYTLIN, G.D.; BARONOV, A.Ya., red.

[Easing the start of engines in winter] Oblegchenie puska dvigatelei v zimnee vremia. Moskva, Nauchno-tekhn. izd-vo M-va avtomobil'nogo transporta i shosseinykh dorog RSFSR, 1963. 70 p. (MIRA 17:10)

S
633
.B2

Baronov, M F ,ED.

Primeneniye Udobreniy (Use of Fertilizers)

Moskva, Sel'khozgiz, 1958.

167 P. Illus., tables. (Peredovoy Opyt v Sel'skom Khozyastveo

Bibliographical Footnotes.

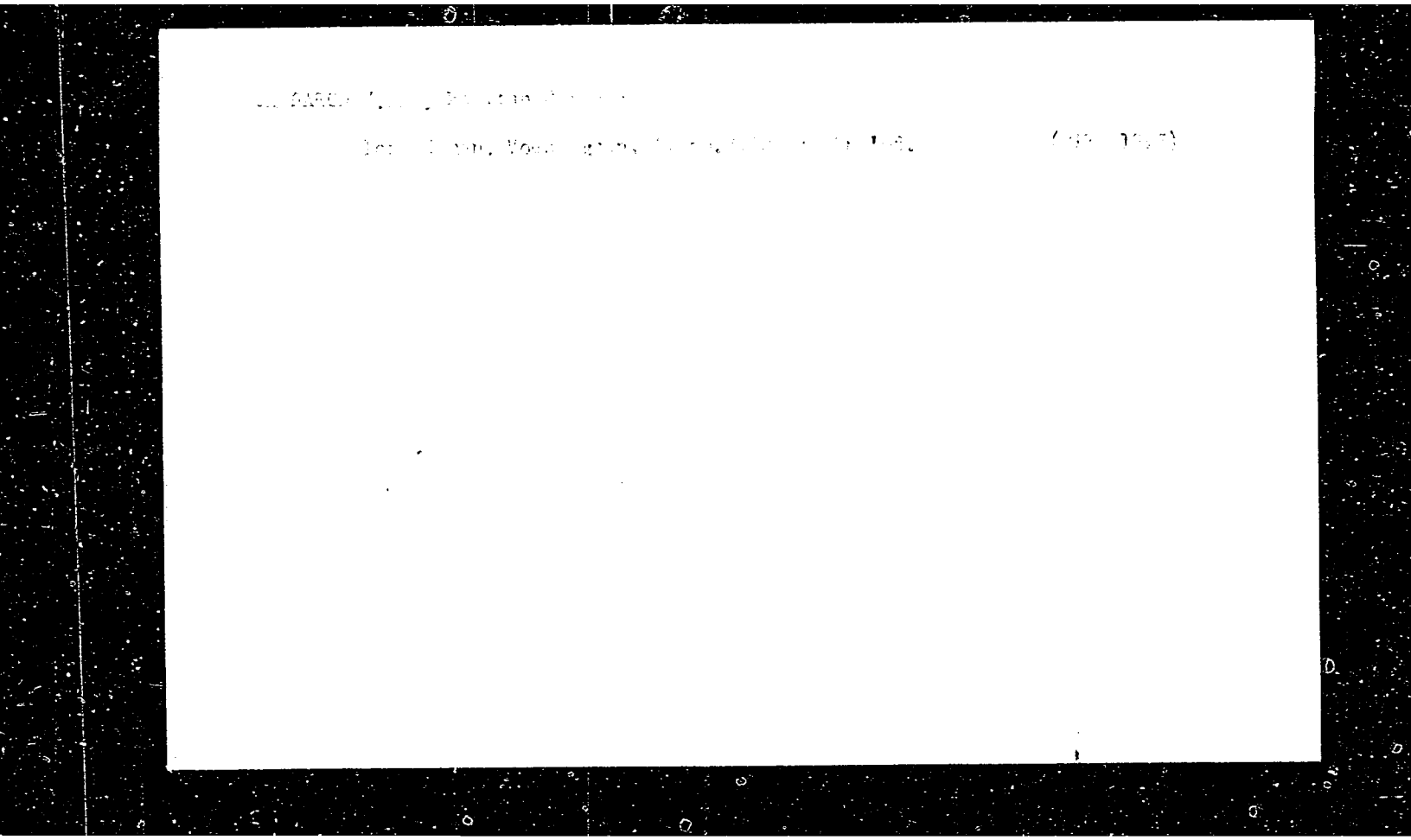
BARONOV, O., kapitan-leytenant

Navigation electricians. Voen. znan. 36 no.1:27-28 Ja '60.
(MIRA 12:12)

(Gyrocompass) (Nautical instruments)

BARONOV, O., kapitan 3 ranga

Helmsman and signalman. Voen. znan. 40 no.8:10-11 Ag '64.
(MIRA 17:11)



BARONOV, O., kapitan 2-go ranga

The top submarine. Voen. znan. 42 no.1:16 Ja '66.
(MIRA 19:1)

BARONOV, P.N.; VESELOV, L.G.

Complex use of aerial and land magnetic surveys for the purposes of geological mapping. Geol. i geofiz. no.10:145-155 '64. (MIRA 18:4)

1. TSentral'naya geofizicheskaya ekspeditsiya, Novokuznetsk.

BARONOV, V.A., polkovnik meditsinskoy sluzhby

Combined lesions of the nervous system in atomic explosions. Voen.-med. zhur. no.4:21-26 Ap '56. (MLRA 9:9)
(ATOMIC BOMB--PHYSIOLOGICAL EFFECT)
(NERVOUS SYSTEM--WOUNDS AND INJURIES)

KUZNETSOV, V.I., polkovnik med. sluzhby; BARONOV, V.A., polkovnik med. sluzhby; TITOV, A.I., polkovnik med. sluzhby, dots.; FIALKOVSKIY, V.V., polkovnik med. sluzhby; SMIRNOV, K.K., polkovnik med. sluzhby, kand. med. nauk; DOVZHENKO, G.I., polkovnik med. sluzhby; DIVNENKO, P.G., polkovnik med. sluzhby; GORYUSHIN, G.S., podpolkovnik med. sluzhby; SHCHERBEKOV, N.I. podpolkovnik med. sluzhby; ZHUK, Ye. G., podpolkovnik med. sluzhby; BUTOMO, N.V., mayor med. sluzhby; PREOBRAZHENSKIY, P.V., mayor med. sluzhby; TIKHONOV, K.B., mayor med. sluzhby

Clinical manifestations in subjects exposed to prolonged ionizing irradiation. Voen. med. zhur. no.2:40-43 F '57 (MIRA 12:7)
(RADIATIONS, effects,
clin. manifest. in subjects exposed to prolonged ionizing irradiation (Rus))

SHAMOV, Vladimir Nikolayevich, prof.; BARONOV, V.A., doktor med.nauk; SAMOTOKIN, B.A., dotsent; GREBENYUK, V.I., prepodavatel'; GRIGOROVICH, K.A., prof.; ALEKSANDROV, N.N., doktor med.nauk; MARGORIN, Ye.M., red.; RULEVA, M.S., tekhn.red.

[Surgery for injuries of the nervous system; a practical manual] Khirurgiia povrezhdenii nervnoi sistemy; prakticheskoe rukovodstvo. Leningrad, Gos.izd-vo med.lit-ry, Leningr.otd-nie, 1959. 479 p. (MIRA 13:5)

1. Deystvitel'nyy chlen AMN SSSR (for Shamov).
(NERVOUS SYSTEM--SURGERY)

BARONOV, V.A., polkovnik meditsinskoy sluzhby, prof.

Diagnosis of thesequelae of a closed cerebral trauma in military medical expertise. Voen.-med. zhur. no.8:44-48 '64. (MIRA 18:5)

CZECHOSLOVAKIA UDC 615.779.93-033

BARNA, K.; BARNOVA, E.; BELOVA, V.; WESSELA, E.; Chair of Medical Chemistry, Medical Faculty, P.J. Safarik University (Katedra Lekarskej Chemie Lekarskej Fakulty Univerzity P.J. Safarika), Kosice, Head (Veduci) Docent Dr K. BARNA

"Distribution of Antibiotics in Blood. V. Tetracyclines and Erythrocytes."

Prague, Casopis Lekaru Ceskych, Vol 105, No 27-28, 4 Jul 66, pp 726-731

Abstract [Authors' English summary modified]: The bond of tetracycline to intact bovine erythrocytes and to isolated erythrocytes fractions -- hemoglobin and stroma- in vitro was investigated. Erythrocytes have greater affinity for oxytetracycline, followed by tetracycline, and finally chlortetracycline. The bond is established immediately and alters during incubation period. Part of the chlortetracycline and tetracycline is irreversibly bound to red blood cells; oxytetracycline is bound by a labile bond. Chlortetracycline and tetracycline have a great affinity for stroma, oxytetracycline has a greater affinity for hemoglobin than for the stroma. 5 Fig., 4 Tab., 12 West., 5 East., 1 Jap. ref. (Ms. rec. Nov. 65).

L 10986-66 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD

ACC NR: AP6000004 UR/0080/65/038/011/2473/2479

29

AUTHOR: Layner, L.V.; Layner, V.I.; Baronova, Z.A.

ORG: None

TITLE: Chemical polishing and etching of single silicon crystals for exposure of dislocations

SOURCE: Zhurnal prikladnoy khimii, v.38, no.11, 1965, 2473-2479

TOPIC TAGS: crystal dislocation, silicon single crystal, metallography

ABSTRACT: Two ternary systems were investigated in the experiments: $HF-HNO_3-H_2O$ and $HF-CrO_3-H_2O$. The system $HF-HNO_3-H_2O$ was used to establish the optimum region for the polishing of a silicon single crystal, and the system $HF-CrO_3-H_2O$ for the optimum region for etching to expose dislocations. The effect of concentration of individual components of the $HF-HNO_3-H_2O$ system on the quality of the polished surface was determined by setting up a triangular concentration diagram. The diagram was constructed with data from the study of 230 tested solutions and is given in the article. A figure shows the dependence of the rate of solution of silicon with an increase in the concentration of HNO_3 and the decrease in the concentration of HF with a varying amount of added water. For exposure of dislocations, the authors studied the etching of

Card 1/2 UDC: 621.357.8 + 621.315.592

L 10986-66
ACC NR: AP6000004

chemically polished silicon in the mixture HF-CrO_3-H_2O. These experimental data are also exhibited in the form of a triangular diagram. It was established that the rate of solution of silicon in the optimum regions of the system HF-HNO_3-H_2O is approximately 100 times greater than in the corresponding regions of the system HF-CrO_3-H_2O. Orig. art. has: 7 figures.

SUB CODE: 07,11/ SUBM DATE: 22Apr64/ ORIG REF: 001/ OTH REF: 004

Card 2/2

LUBENETS, I.A.; ZHUKOV, D.G.; VOINOV, S.G.; SHALIMOV, A.G.; KOSOY, L.F.; KALINNIKOV, Ye.S.; CHERNYAKOV, V.A.; YAMTSEV, M.A.; GOLIKOV, Ye.S.; MYSINA, G.Ye.; Prinimali uchastiye: KEYS, N.V.; PEGOV, V.G.; MEN'SHENIN, Ye.B.; BARNOVALOV, M.A.; SHIFER, G.B.; SHATALOV, M.I.; MOLCHANOVA, A.A.; ANISIMOVA, M.Ye.

Refining steel with synthetic slag from large-capacity arc furnaces. Stal' 25 no.3:232-235 Mr '65. (MIRA 18:4)

L 32588-66 EWT(1) SCIB DD
ACC NR: AR5024087 SOURCE CODE: UR/0299/65/000/016/G001/G002

AUTHOR: Baronovskiy, A. G.

TITLE: Accumulation dynamics of the photosynthetic pigments in plant ontogenesis in relation to phosphorous nutrition

SOURCE: Ref. zh. Biologiya, Abs. 16G5

REF SOURCE: Tr. 1-y Resp. nauchn. konferentsii fiziologov i biokhimikov rast. Moldavii. Kishinev, Kartya Moldovenyaske, 1964, 139-147

TOPIC TAGS: agriculture, plant physiology, photosynthesis

ABSTRACT: A study was made of geminate corn hybrids: the early VIR-25, the mid-season VIR-117 and the late VIR-156. The plants were grown on loamy ground (Biological Station of the Kiyev University). Granulated superphosphate containing 20% P_2O_5 (an estimated 30 kg of primary nutrition to one hectare) was added to experimental plots. The green pigments were determined according to Godnev, the yellow — according to Sapozhnikov. Throughout the vegetation period, the leaves of the experimental plants contained from 10 to 12% more green pigments and from 5 to 6% more yellow. During the ontogenesis process the

Card 1/2 UDC 581.132

L 32588-66

ACC NR: AR5024087

content of green and yellow pigments increased regularly until the heading of panicles phase. During the following phases, their content gradually decreased. Under the effect of phosphorous fertilizers, the ratio of the green pigments of the plants increased in relation to the yellow. The difference between the hybrids in pigment content is in direct ration to the vegetative mass and grain accumulated by the plants. Ye. Yurina

SUB CODE: 06/ SUBM DATE: Aug65

Card 2/2

BARONOVSKIY, Nikolay Fedorovich

Ozokerit; dobycha, pererabotka i primeneniye /Ozocerite; extraction, treatment and application, by/ N. F. Baranovskiy /1/ M. F. Sukharev. Moskva, Gostoptekhizdat, 1959.
205 P. Illus., Diagrs., Maps, Tables.
"Literatura": P. 202-204

COUNTRY : [illegible] E

CATEGORY : Chemical Technology. Chemical Products and Their Applications. Pesticides.

ABS. JOUR. : [illegible], No 10, 1959, No. [illegible]

AUTHOR : [illegible], [illegible]; Baranowski, [illegible]; Michalski, [illegible]

INSTITUTE : -

TITLE : [illegible] Production of Rhodenticides and the [illegible] of Its Employment.

ORIG. PUB. : [illegible]

ABSTRACT : No abstract

Card: [illegible]

[illegible] - 59

BARONOWSKI, Bronislaw, mgr.inz.

Aluminum foil for electric engineering. Rudy i metale 7 no.6:268-271 Je '62.

BARONSKIY, A.V.

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(MIRA 16:5)

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